

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

RESOLUTION NO. 95-63 As Amended
(Amendment No. 1 on Feb. 13, 1997)

A RESOLUTION CONDITIONALLY WAIVING ADOPTION OF
WASTE DISCHARGE REQUIREMENTS
FOR DISPOSAL/REUSE OF WASTE SOILS
CONTAMINATED WITH PETROLEUM HYDROCARBON FUELS

WHEREAS, Section 13260(a) of the California Water Code requires that any person discharging waste or proposing to discharge waste within the Region, other than to a community sewer system, that could affect the quality of the waters of the State, shall file a report of waste discharge; and

WHEREAS, Section 13263(a) of the California Water Code requires that California Regional Water Quality Control Boards prescribe requirements as to the nature of existing and proposed discharges in their respective areas of jurisdiction; and

WHEREAS, California Code of Regulations, Title 23, Division 3, Chapter 15 commencing with Section 2510 contain requirements governing discharges of waste to land; and

WHEREAS, Regional Board staff receives numerous requests regarding disposal and reuse of soils which contain low level concentrations of petroleum hydrocarbon fuels, mostly gasoline and diesel, resulting from various cleanup activities in the San Diego region; and

WHEREAS, the Regional Board has determined it necessary to develop region wide disposal and reuse criteria that encourages alternatives to disposal of FCS to Class III landfills, this would increase the life of operating landfills in the San Diego region; and

WHEREAS, for the purpose of this Resolution, FCS is defined as gasoline, diesel, kerosene and jet fuel contaminated soil; and

WHEREAS, in September 1993, a work group was initiated by the State Water Resources Control Board (State Board). In February 1995, the work group completed its mission and developed a staff report that assists in establishing criteria for disposal/reuse of contaminated soil, including FCS. The group was led by staff of this Regional Board and made up of technical staff from the State Water Resources Control Board and other regional boards; and

WHEREAS, oversight of cleanup and abatement activities for discharges of waste subject to Section 13304 of the California Water Code, including remedial action for releases of hazardous substances from underground storage tanks, is governed by State Board Resolution No. 92-49, as amended, and the *Water Quality Control Plan, San Diego Basin (9)* (Basin Plan); the waiving of adoption of waste discharge requirements for certain discharges of low-level FCS does not affect or supersede the

policies or procedures governing such oversight or the establishment of cleanup levels pursuant to such policies and procedures.

WHEREAS, Section 13269 of the California Water Code authorizes Regional Boards to waive adoption of waste discharge requirements for a specific discharge or a specific type of discharge where such a waiver is not against the public interest; and

WHEREAS, Section 13269 of the California Water Code stipulates that any waiver from filing a report of waste discharge and/or prescribing waste discharge requirements shall be conditional and may be terminated at any time by the Regional Board; and

WHEREAS, this Regional Board finds that waiver of a report of waste discharge and issuance of waste discharge requirements, where such a waiver is not against the public interest, would enable Regional Board staff resources to be used more effectively; and

WHEREAS, this Regional Board finds that a waiver of adoption of waste discharge requirements for a specific type of discharge would not be against the public interest under one or more of the following circumstances:

1. The type of discharge is effectively regulated by other public agencies; or
2. The type of discharge does not adversely affect the quality of or the beneficial uses of the waters of the State; or
3. The type of discharge is not readily amenable to regulation through adoption of waste discharge requirements; or
4. The type of discharge is regulated through oversight by the Regional Board; and

WHEREAS, actions taken by or at the direction of public agencies to cleanup or abate conditions of pollution or nuisance resulting from unintentional or unauthorized releases of waste pollutants to the environment are exempt from the provisions of Chapter 15 (Discharges of Waste to Land), Division 3, Title 23 of the California Code of Regulations provided that materials removed under such actions are discharged in accordance with Article 2 (Waste Classification and Management) of Chapter 15; and

WHEREAS, on November 15, 1993 the Regional Board staff adopted a Negative Declaration for three types of discharges, including the disposal and reuse of petroleum hydrocarbon fuel contaminated soils, in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) and State guidelines, and the Regional Board determines there will be no significant adverse water quality impacts; and

WHEREAS, the Regional Board held a public hearing on May 16, 1995 in Temecula and considered all evidence and public comments concerning this matter.

THEREFORE, BE IT RESOLVED, that pursuant to Water Code Section 13269, the Regional Board waives the issuance of waste discharge requirements for the following type of discharge, provided that the discharge shall comply with the conditions set forth in this resolution, **Water Quality Control Plan, San Diego Basin** and applicable regulations of other public agencies; and further provided that this waiver shall not apply to those discharges for which waste discharge requirements have been previously adopted.

Conditions for Disposal/Reuse of FCS as Inert Waste to Unclassified Waste Management Units

1. This waiver does not apply to hazardous waste as defined in California Code of Regulations, Title 22, Division 3, Chapter 30, Article II.
2. The quantity of petroleum hydrocarbon fuel contaminated soil that may be disposed of at the proposed waste management unit shall not exceed 5000 cubic yards.
3. Site Conditions: The proposed disposal site shall meet the following conditions:
 - a. ***Groundwater Dependent Area Protection: The disposal site shall not be located in an area that is dependent on groundwater for the sole source of drinking water.***
 - b. ***Industrial Use Restriction: The disposal site shall only have an industrial or commercial use such as a road bed, commercial fill site or other use that limits potential human exposure. Residential properties are not to be used as disposal sites. If a structure is to be constructed over the disposal site an approval must be obtained from the appropriate local agencies***
 - c. Separation from Ground Water: The soil/waste shall be placed at least five feet above the highest anticipated level of ground water. The soil that separates the waste soil from groundwater shall have a significant clay content (greater than 5% clay-sized material) or a permeability of less than 10^{-5} cm/sec. If the soil does not meet these conditions the Regional Board will consider a demonstration by the discharger that the site provides a Chapter 15 equivalency.
 - d. Separation from Surface Water: The soil/waste shall be placed at least 100 feet from the nearest surface water.
 - e. Flood Plan Protection: The soil/waste shall be protected against 100 year peak stream flows as defined by the County flood control agency.
 - f. Cover: The soil/waste shall be covered by either 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover shall either provide a permeability of less than 10^{-5} cm/sec., or it shall be soil compacted to 90% relative maximum compaction.
 - g. Property Owner Acknowledgment: By written correspondence to the Regional Board, the property owner shall approve the placement of the soil/waste at the site.

4. All treated soils must be sampled and analyzed using the following minimum requirements:

- a) **Sampling:** All soil samples shall be taken in accordance with sampling guidelines set forth in the most recently promulgated edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846," U.S. Environmental Protection Agency. For quantities of soil less than or equal to 500 cubic yards, four samples per 100 cubic yards will be taken. For quantities of soil between 500 to 5000 cubic yards, an additional sample shall be taken for every 500 cubic yards. A minimum of four samples shall be taken for all parameters analyzed according to either primary and/or secondary analytical protocols.
- b) **Primary Analysis:** The soil samples shall be analyzed for the primary constituents of concern as listed in Table 1.
 - i) **Primary-Gasoline**

Gasoline contaminated soils shall be analyzed using the DHS/EPA Method 8015 modified to quantify the total petroleum hydrocarbons through the carbon range C₆ to C₁₂. The minimum detection limit for this Method 8015M of analysis shall be no greater than 10 mg/kg. Additionally, the soil shall be analyzed using EPA Method 8020 to quantify the concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX). The minimum detection limits for Method 8020 shall be no greater than 5 µg/kg.
 - ii) **Primary-Diesel**

Diesel contaminated soils shall be analyzed using the DHS/EPA Method 8015 modified to quantify the total petroleum hydrocarbons through the carbon range C₁₂ to C₃₀. The minimum detection limit for this method of analysis shall be no greater than 10 mg/kg. Additionally, the soil shall be analyzed using EPA Methods 8020 to quantify the concentrations of BTEX. The minimum detection limits for Method 8020 shall be no greater than 5 µg/kg.
- c) **Secondary Analysis:** If the primary level conditions (Condition 5.a) are not met, the soil samples exhibiting the highest concentrations as a result of the primary analyses (a minimum of 4 samples for all parameters tested) shall be further analyzed for the secondary constituents of concern (Table 2).
 - i) **Secondary-Gasoline**

For secondary analysis, the samples of gasoline contaminated soils shall be extracted using the Toxicity Characteristic Leaching Procedure, modified to extract with deionized water (DI TCLP). Procedures for the TCLP are described in Appendix I, Chapter 18, Division 4.5, Title 22 of the California Code of Regulations. The DI TCLP extract shall be analyzed for BTEX using Method 8020. The minimum detection limit for BTEX in water, using Method 8020, shall be no greater than 0.5 µg/L.

ii) Secondary-Diesel

For secondary analysis, diesel contaminated soils shall be extracted using the Toxicity Characteristic Leaching Procedure, modified to extract with deionized water (DI TCLP). Procedures for the TCLP are described in Appendix I, Chapter 18, Division 4.5, Title 22 of the California Code of Regulations. The DI TCLP extract shall be analyzed for diesel using DHS/EPA Method 8015 modified to quantify the total petroleum hydrocarbons through the carbon range C₁₂ to C₃₀, and BTEX using Method 8020. The minimum detection limit for the method of analysis for diesel in water (8015M) shall be no greater than 50 µg/L. The minimum detection limit for BTEX in water, using Method 8020, shall be no greater than 0.5 µg/L.

5. Concentration Limits: The results of sampling and analyses of the petroleum hydrocarbon fuel contaminated soil shall be subject to either the primary level (a) or the secondary level (b) conditions listed below.

- a. Primary Level Conditions (First Tier): The upper 80% confidence interval value of the mean concentrations resulting from the primary analyses of the samples shall not exceed the concentration limits for the primary constituents of concern listed in Table 1.
- b. Secondary Level Conditions (Second Tier): The upper 80% confidence interval value of the mean concentrations resulting from the secondary analyses shall not exceed the concentration limits for the secondary constituents of concern listed in Table 2.

Table 1. Primary Analytical Methods and Concentration Limits for Gasoline and Diesel Contaminated Soils

{PRIVATE }Type of Contaminant	Constituent of Concern	Carbon Range	Prep. Method	DHS/EPA Method of Analysis	Concentration Limit
Gasoline	TPH-Gasoline	C ₆ -C ₁₂	3550	8015M	≤10 mg/kg
Diesel	TPH-Diesel	C ₁₂ -C ₃₀	3550	8015M	≤100 mg/kg
Gas/Diesel	Benzene		5030	8020	≤1 µg/kg
Gas/Diesel	Toluene		5030	8020	≤150 µg/kg
Gas/Diesel	Ethylbenzene		5030	8020	≤700 µg/kg
Gas/Diesel	Xylenes		5030	8020	≤1750 µg/kg

Table 2. Secondary Analytical Methods and Concentration Limits for Gasoline and Diesel Contaminated Soils

{PRIVATE }Type of Contaminant	Constituent of Concern	Ext. Method	Carbon Range	Prep. Method	DHS/EPA Method of Analysis	Concentration Limit
Gas	TPH-Gas		C ₄ -C ₁₂	3550	8015M	≤100 mg/kg
Diesel	TPH-Diesel		C ₁₂ -C ₃₀	3550	8015M	≤500 mg/kg
Diesel	TPH-Diesel	DI TCLP	C ₁₂ -C ₃₀	3510	8015M	≤50 µg/L
Gas/Diesel	Benzene	DI TCLP		5030	8020	≤0.5 µg/L
Gas/ Diesel	Toluene	DI TCLP		5030	8020	≤75 µg/L
Gas/Diesel	Ethylbenzene	DI TCLP		5030	8020	≤350 µg/L
Gas/Diesel	Xylenes	DI TCLP		5030	8020	≤900 µg/L

6. *The discharger shall complete a public notification 45 days prior to the disposal. Adjacent property owners and other interested parties are to be notified of the plans for the soil disposal utilizing a format approved by the Executive Officer. Comments are to be taken into consideration for the soil disposal.*
7. The discharger shall file a certification report ~~when the 30 days prior to disposal is completed~~, on a form approved by the Executive Officer. *Comments received in response to the public notification are to be forwarded with the certification report.*

BE IT FURTHER RESOLVED, that, pursuant to Section 13260(a) of the California Water Code, the discharger shall, prior to disposal, submit a report of waste discharge (RWD) if both the primary and secondary level conditions listed above (Condition 5.a and 5.b) are not met; and

BE IT FURTHER RESOLVED, that this action waiving the issuance of waste discharge requirements shall not be construed to affect the policies and procedures relied upon by the State Board to administer cleanup and abatement actions under Section 13304 of the California Water Code, or to establish cleanup levels at sites affected by discharges of wastes, including releases of hazardous substances from underground storage tanks, provided that this Order may be applicable to the ultimate disposal of soil removed from the site of such discharges after such soil has been remediated; and

BE IT FURTHER RESOLVED, that where staff of this Regional Board considers adoption of waste discharge requirements for a specific discharge of a type identified herein to be in the public interest, staff will draft tentative waste discharge requirements for that discharge for consideration by this Regional Board; and

BE IT FURTHER RESOLVED, that this action waiving the issuance of waste discharge requirements is conditional, may be terminated for any type of discharge at any time, does not permit an illegal discharge, and does not preclude the need for permits which may be required by other local or governmental agencies, and does not preclude the Regional Board from administering enforcement remedies, pursuant to Section 13304 of the California Water Code, in the case of threatened pollution or nuisance; and

I, Arthur L. Coe Executive Officer, do hereby certify the foregoing is full, true, and correct copy of Resolution 95-63 adopted by the California Regional Water Quality Control Board, San Diego Region, on August 8, 1996.

Original signed by
ARTHUR L. COE
Executive Officer

I, ***John H. Robertus***, Executive Officer, do hereby certify the foregoing is full, true, and correct copy of Amendment No. 1 to Resolution 95-63 adopted by the California Regional Water Quality Control Board, San Diego Region, on Feb. 13, 1997.

Original signed by
JOHN H. ROBERTUS
Executive Officer